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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,009	03/23/2004	Misty Azara	CQ10220	2808
23493	7590	01/31/2008		
SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037			EXAMINER AZAD, ABUL K	
			ART UNIT 2626	PAPER NUMBER
			NOTIFICATION DATE 01/31/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@sughrue.com  
USPatDocketing@sughrue.com

**Office Action Summary**

Application No.

10/807,009

Applicant(s)

AZARA ET AL.

Examiner

ABUL K. AZAD

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5-8,10,11 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,10,11 and 14-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the communication filed on October 4, 2007.
2. Claims 1, 2, 5-8, 10, 11, 14-20 are pending in this action. Claims 1, 7, 8, 10 and 16 have been amended. Claims 3, 4, 9, 12 and 13 have been canceled.
3. The applicant's arguments with respect to claims 1, 2, 5-8, 10, 11 and 14-20 have been fully considered but they are not deemed to be persuasive. For examiner's response to the applicant's arguments or comments, see the detailed discussion in the Response to the Arguments section.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Jurafsky et al. (Automatic Detection of Discourse Structure for Speech Recognition and Understanding).

As per claim 1, Jurafsky teaches, "a method of determining user interactions comprising the steps of: "determining speech information" (section 3 Dialog Act

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Detection); "determining discourse functions and prosodic features in the speech information" (section 3.1 Prosodic Dialog Act Detection);

"determining a predictive interaction model" (section 3.1 Prosodic Dialog Act Detection); and

"determining an interaction turn based on the predictive interaction model and the determined discourse functions and prosodic features (Section 3.4, The combined Dialog Act Detector), wherein the discourse functions are determined based on a theory of discourse analysis (Sections 3.2 and 3.3), the theory of discourse analysis is at least one of: the Linguistic Discourse Model, the Unified Linguistic Discourse Model, Rhetorical Structures Theory, Discourse Structure Theory and Structured Discourse Representation Theory" (Sections 3.2 and 3.3)".

As per claim 2, Jurafsky teaches, "in which the discourse functions are determined from automatically recognized speech information" (Section 1. Introduction).

As per claim 5, Jurafsky teaches, "further comprising the step of scheduling an interaction event based on the turn prediction" (Abstract).

As per claim 6, Jurafsky teaches, "in which the prosodic features include at least one of: a silence preceding a discourse functions; a silence following a discourse function; rate of speech; pitch frequency; changes in pitch frequency and volume" (Section 3).

As per claims 7-20, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1-6.

***Response to Arguments***

6. The applicant argues, "the approach taken by the Jurafsky et al. reference to discourse analysis theories such as Linguistic Discourse Model, the Unified Linguistic Discourse Model, Rhetorical Structures Theory, Discourse Structure Theory and Structured Discourse Representation Theory. In this regard, Applicants call the Examiner's attention to section 3.3 of Jurafsky et al. which describes the aforesaid N-gram discourse grammars. On the other hand, Jurafsky et al. reference makes no mention of the claimed determining discourse function based on theory of discourse analysis including linguistic discourse model, Unified Linguistic Discourse Model, Rhetorical Structures Theory, Discourse Structure Theory and Structured Discourse Representation Theory. For this reason, Jurafsky et al. does not teach or suggest all the limitations of the amended claims 1, 7, 10 and 16 made, therefore, these claims are not anticipated by Jurafsky et al".

7. The examiner disagrees with the applicant's above assertion, because the Jurafsky reference describes N-gram discourse grammar, which is theory of discourse including at least linguistic discourse model. Since applicant did not particularly mention what is the difference between Jurafsky's determining N-gram discourse grammar with the claimed determining discourse function based on theory of discourse analysis including linguistic discourse model, therefore, Jurafsky's N-gram discourse grammar reads on the claimed limitation.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(571) 272-7599**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Patric Edouard**, can be reached at **(571) 272-7603**.

Any response to this action should be mailed to:

**Commissioner for Patents**

**P.O. Box 1450**

**Alexandria, VA 22313-1450**

Or faxed to: **(571) 273-8300**.

Hand-delivered responses should be brought to **401 Dulany Street, Alexandria, VA-22314** (Customer Service Window).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 23, 2007



Abul K. Azad  
Primary Examiner  
Art Unit 2626